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Huawei SFP-GE-BX-U1-I Optical Module Datasheet

1000BASE-BX SFP Single-fiber Bidirectional Optical Module | TX 1310 nm / RX 1490 nm | LC | 10 km

Gigabit Ethernet single-fiber bidirectional (BIDI) optical transceiver

Product Overview

The SFP-GE-BX-U1-I (part number 02311DMF) is a Gigabit Ethernet optical module in the SFP form factor. It complies with the 1000BASE-BX standard and transmits at 1310 nm and receives at 1490 nm over a single single-mode fiber, using an LC connector. It supports digital diagnostic monitoring (DDM) and has a working case temperature range of -40°C to +85°C.

Product Highlights

- Standard-compliant 1000BASE-BX, 1 Gbit/s transmission rate
- Single-fiber bidirectional: TX 1310 nm, RX 1490 nm, single-mode fiber (SMF), LC connector
- Transmission distance up to 10 km on single-mode fiber
- Digital diagnostic monitoring (DDM) supported
- Wide working case temperature range: -40°C to +85°C (-40°F to +185°F)
- Hot-swappable SFP form factor

Usage Notes

- Optical modules must be certified for use on Huawei S switches. Non-certified modules cannot ensure transmission reliability and may affect service stability.
- Single-fiber bidirectional (BIDI) optical modules must be used in pairs. SFP-GE-BX-U1-I must be used with SFP-GE-BX-D1-I.
- The transmit optical power of one end must be within the receive range of the other end.

Source: Huawei S200, S300, S500, and S600 Series Switches Hardware Description, Issue 06 (2026-03-30), section 9.5.21 SFP-GE-BX-U1-I, Table 9-27. The information in this document is subject to change without notice. Huawei and other Huawei trademarks are trademarks of Huawei Technologies Co., Ltd.

Product Specifications

Basic Information

Item	Value
Module name	SFP-GE-BX-U1-I
Part Number	02311DMF
Model	SFP-GE-BX-U1-I
Form factor	SFP
Application standard	1000BASE-BX
Connector type	LC
Optical fiber type	SMF
Working case temperature [°C(°F)]	-40°C to +85°C (-40°F to +185°F)
Digital diagnostic monitoring (DDM)	Supported
Transmission rate [bit/s]	1 Gbit/s
Target transmission distance [km]	Single-mode fiber: 10 km

Transmitter Optical Characteristics

Item	Value
Center wavelength [nm]	1490 nm (RX) 1310 nm (TX)
Maximum Tx optical power [dBm]	-3 dBm
Minimum Tx optical power [dBm]	-9 dBm
Minimum extinction ratio [dB]	9 dB

Receiver Optical Characteristics

Item	Value
Rx sensitivity [dBm]	-19.5 dBm
Overload power [dBm]	-3 dBm